GOVERNMENT OF INDIA
ENVIRONMENT AND FORESTS
LOK SABHA

STARRED QUESTION NO:1
ANSWERED ON:19.11.2001
CULTIVATION OF GENETICALLY MODIFIED BT COTTON VARIANT CROP
RAVINDRA KUMAR PANDEY;RENU KUMARI SINGH

Will the Minister of ENVIRONMENT AND FORESTS be pleased to state:

(a) whether genetically modified Bt cotton variant crop has been grown in different parts of the country;

(b) if so, the name of States where such crops have been grown along with the total production and the area covered thereunder;

(c) whether the Government have given approval for the cultivation of Bt cotton;

(d) if not, the reasons therefor and the action taken/proposed to be taken against the offenders for providing such seeds to the farmers;

(e) whether the Genetic Engineering Approval Committee (GEAC) has directed the concerned States to procure standing cotton crop from farmers for burning it;

(f) if so, the details thereof and the reasons therefor together with the reaction of the various States to such directives;

(g) the steps taken by the Government to rehabilitate the farmers who are likely to be affected; and

(h) the details of the policy of the Government in regard to the cultivation of genetically modified Bt cotton variant crop?

Answer

MINISTER FOR ENVIRONMENT AND FORESTS (SHRI T.R.BAALU)

(a) to (h) A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (h) OF REPLY TO THE LOK SABHA STARRED QUESTION NO SHRIMATI RENU KUMARI AND SHRI RAVINDRA KUMAR PANDEY REGARDING `CULTIVATION OF GENETICALLY MO BT COTTON VARIANT CROP` DUE FOR REPLY ON 19-11-2001

(a) to (h) The Government has not yet given approval for commercial cultivation of genetically modified Bt cotton in the country. In June 2001, the Genetic Engineering Approval Committee (GEAC) set up under Rule 4 of the Rules for Manufacture, Use, Import, Expor and storage of hazardous microorganisms/Genetically Engineered Organisms or Cells 1989` notified under the Environment (Protection) Act, 1986, has directed the Maharashtra Hybrid Seed Company (MAHYCO) to repeat large scale field trials of its three B cotton hybrids (MECH 12, MECH 162, MECH 184) on farmers fields in an area of about 100 hectares in the states of Andhra Pradesh, Karnataka, Gujarat, Maharashtra, Madhya Pradesh and Tamilnadu. In addition, the Indian Council for Agricultural Research (ICAR) is also conducting field trials of MAHYCO`s Bt cotton under their Advanced Varietal Trials of All India Coordinated Cotton Improvement Project. ICAR is conducting these trials in about 7.5 hectares in Maharashtra, Madhya Pradesh and Gujarat in the central zone, and Andhra Pradesh, Karnataka and Tamilnadu in the southern zone.

In September 2001, it was brought to the notice of the Government that Navbharat Seeds Pvt. Ltd., Ahmedabad has marketed hybrid cotton seed by brand name Navbharat 151 as a conventionally developed hybrid which is tolerant to bollworm. Tests conducted on seeds from a sealed packet of Navbharat 151 as well as on the spot inspection of six fields near Ahmedabad where this hybrid is under cultivation indicated that Navbharat 151 contains Cry 1 A (c) gene which goes to establish that it is a transgenic variety, and not a conventional hybrid.

The 1989 Rules provide that approvals for any large scale releases into the environment, including any deliberate release into environment for the purpose experiment, of transgenic organisms are to be given by the GEAC. The company has marketed the Navbharat 151 transgenic hybrid without the mandatory approval of the GEAC. In Gujarat, nearly 11,000 acres is under cultivation of Navbharat 151 variety in 19 districts namely Kheda, Surat, Baroda, Ahmedabad, Junagarh, Amreli, Surindernagar, Kachchh, Jamnagar, Rajkot, Bhavnagar, Banaskantha, Mehasana, Patan, Anand, Gandhinagar, Sabarkantha, Baruch, and Narmada. It has also marketed a small quantity of Navbharat 151 seeds in Maharashtra, Madhya Pradesh and Andhra Pradesh. In addition ,this company is undertaking seed production of transgenic cotton in 365 hectares in Nandyal and Kurnool districts of Andhra Pradesh. Since the crop has not been harvested, the exact production figures are not known.

For the last five years, MAHYCO has beerinvolved in research, development, and testing of transgenic Bt cotton, after carefully following the procedures stipulated under the 1989 Rules for evaluating the environmental risks. MAHYCO approached the GEAC for seeking environmental clearance for commercial cultivation of transgenic Bt cotton in June 2001. However, GEAC directed the MAHYCO to repeat the field trials considering that the field trials conducted earlier could not properly evaluate the potential of the Bt cotton. Being the first transgenic crop to be considered for commercial cultivation in India, the GEAC adopted a cautious and pragmatic approach, to get a better picture about the potential advantages and environmental effects of Bt Cotton. The large scale field trials of MAHYCO`s Bt cotton are presently underway.

Navbharat Seeds Pvt Ltd has marketed transgenic Bt cotton seeds without any biosafety assessment as laid down in the 1989 Rules thereby violating the provisions of these Rules and the Environment Protection Act. The GEAC has directed the Gujarat State Biotechnology Coordination Committee to:

- procure the cotton bolls of Navbharat 151 crop from the farmers at the appropriate support price;
- separate the lint and seed;
- destroy the seed and store the lint in safe custody till further orders from GEAC ;
- complete destruction of crop residue by uprooting and burning and sanitation of fields.

To carry out the operations,the Government of Gujarat has tied up with the Gujarat Cooperative Cotton Federation (GUJCOT).

The Government of Andhra Pradesh has been directed totake necessary action for stopping immediately the transgenic seed production and multiplication programme of the Navbharat Company, on the lines of the directives given to the Government of Gujarat. The States of Maharashtra, M.P.,Karnataka, Chattisgarh, Tamil Nadu, Punjab and Haryana have been asked to gather information about cultivation of Navbharat 151 cotton seeds in their respective States.

The Government has also lodged a complaint against the Navbharat Company in the Metropolitan Magistrate Court in Ahmedabad on 12.11.2001 for penal action for violating Environment Protection Act.

The Government has directed the Gujarat Government to procure the cotton at appropriate support price so that the farmers are not adversely affected.

The Government is following a policy of case by case approval of transgenic crops. Introduction of any new technology requires careful evaluation and long term sustainable benefits. Environmental problems have long term implications. Unless a cautious approach is adopted, gains accrued out of this new technology may be short lived, and may end up in irreversible damage. Extensive Rules and guidelines have been framed for evaluating environmental and health safety aspects of genetically modified organisms. Any company involved in the use of genetic engineering techniques has to obtain approval of the Review Committee on Genetic Manipulation (RCGM) set up under the 1989 Rules in the Department of Biotechnology for conducting testing under laboratory conditions and confined field conditions. Thereafter approval of GEAC is required for large scale field trials and introduction into the environment.